

Colonic Atresia: A Case Report

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Abstract: Atresia of the colon is the rare types of all gastrointestinal atresias. The transverse colon is the rarest site of all the colonic atresias. we report a case of 4-day old female baby who presented with the feature of distal intestinal obstruction. At laparotomy type 3 atresia of the transverse colon, with proximal dilatation of caecum and ascending colon and distal part of transverse as well as descending and sigmoid colon being microcolon is noticed. Newborn underwent exploratory laparotomy and primary ileostomy

Keywords: colonic atresia; ileostomy; Abdominal Distension

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I. Introduction

Atresia of the colon is an uncommon entity distinct from congenital pouch colon, which is a more frequent occurrence in India and Asia, and is associated with anorectal malformation. The reported incidence of colonic atresia is 1 in 20,000 live birth [1,2]. Although the underlying cause of colonic atresia may be vascular insufficiency, the associated with Hirschprung's disease [3,4], in particular, and the gross discrepancy between the proximal and distal bowel diameters is in the way of management in contrast to management strategies described for small bowel atresias.

II. Case Report

A 4-day old term female baby was born through normal delivery, to an otherwise healthy primigravida, at a peripheral hospital. No prenatal problem was detected on routine antenatal visits. The baby did not pass meconium till the 4th day when she developed marked distension of abdomen along with other features of intestinal obstruction. At the time admission in our hospital newborn had distension, mild dehydration. There was no other apparent associated anomaly. Rectal stimulation was inconclusive. Plain x-ray of the abdomen in an erect posture showed multiple air fluid level suggestive of distal small bowel obstruction. A diagnosis of distal large bowel atresia was made. The baby was optimized by fluid and electrolyte replacement. Parenteral antibiotics along with vitamin K were administered.

Laparotomy was performed, on exploration there was type III atresia (A 'v' shaped defect in mesentery with proximal and distal blind ends) of transverse colon with proximal gross dilatation of caecum, ascending colon and the distal part of the ileum is depicted in figure no.1. In this case, the distal ileostomy is done. Newborn recovered well and started on oral feeds on the 3rd postoperative day. Ileostomy stoma (figure no. 2) functions well, and healthy.



Fig 1: Atretic segment of colon and dilated ileum



Fig. 2. Ileostomy stoma

III. Discussion

Colonic atresia accounts for 1.8-15% of intestinal atresia[5]. Ascending colon is the rarest site of colonic atresia. Due to its rarity, it is usually not thought of in the differential diagnosis of neonatal intestinal obstruction. Delayed recognition of symptoms increases the risk of complications like perforation and sepsis[6,7]. Etiology of this anomaly is still debated. Commonly accepted theory is that of in-utero vascular accidents in the early gestation. Colonic volvulus, intussusceptions, incarceration and strangulation of internal hernia in-utero, are also the probable etiological factors [8]. Failure of recanalization after the solid cord stage as in duodenal atresia is also considered to be the cause of colonic atresia. Due to the rarity of the disease available literature is scanty. Associated anomalies like abdominal wall defects(gastroschisis), musculoskeletal disorders, and small gut atresi, ocular and facial anomalies are common.

Uncomplicated right colon atresia can be treated with primary anastomosis with little morbidity whereas staged reconstruction with proximal diversion is advised in sigmoid and left colon atresia, transverse colon to avoid the complications of anastomosis [7,9]. Preservation of ileocaecal valve is desired for future growth of the child. Due to hugely dilated caecum and atretic transverse colon in the reported case, primary anastomosis deferred hence ileostomy seems appropriate. However, the operative strategy depends on the clinical state of the patient, and the safety of the procedure should always be a priority [10]. In the case presented staged procedure was adopted, and it resulted in early recovery and discharge of the patient. Stoma care is an issue in these case especially with ileostomy where effluent is more fluid in nature. To address this issue, an early reversal was planned in our patient.

IV. Conclusion

Colonic atresia is a rare entity that has a better prognosis when intervened earlier, and can be managed with primary ileostomy and planned reversal as well as anastomosis at a later date.

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